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UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL ADJUSTMENT ADMINISTRATION  
SOUTHERN DIVISION

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# Cotton, Land, and People

## A Statement of the Problem

Cotton is the basic crop in the agricultural life of the South. In the 10 principal Cotton States—North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana, Arkansas, Tennessee, Oklahoma, and Texas—the economic welfare of virtually every citizen, regardless of personal activities, rests in a large measure upon an agricultural foundation of which cotton is the keystone.

The 10 Cotton States, which are the basis of this discussion, are famed for many crops, but the annual average cash income in these States from cotton alone is more than the annual cash income from all of the other crops and livestock enterprises combined. Cotton has maintained its dominant place in these 10 States in spite of low prices, boll weevils, overproduction, foreign competition, synthetic fibers, and other limiting factors.

Cotton is a “money crop” upon which the farmers of these States have long depended for cash to pay bills and operating expenses. Regardless of how low prices may be, there is always a market for cotton, even at the smallest crossroads hamlet, where a farmer can exchange his lint and seed for cash. Regardless of what a farm may produce for food and feed, the fact remains that it must also produce some crop or crops which can be sold for cash. Money must be had to pay taxes and labor and buy clothes, seed, fertilizer, machinery, and other things the farm itself cannot produce. To get this cash income, southern farmers have long depended upon “King Cotton,” despite the fact that this ruthless ruler has built a sprawling and densely populated kingdom where poverty and low income prevail.

During the 12 years 1924–35 the annual gross farm income from cotton and cottonseed in the 10 principal Cotton States averaged \$1,019,000,000. This was 41 percent of the average total gross farm income in these States from all crops and livestock enterprises combined; 59 percent of the gross income from crops alone; and was 39 percent larger than the gross income from livestock enterprises. From the standpoint of cash income, cotton occupies an even more important position than is indicated from the gross income data. For the 10 States, the average cash income from cotton in the 12 years 1924–35 amounted to 53 percent of the cash income from all crops and livestock enterprises combined; 67 percent of the cash income from crops alone, and was 158 percent more than the cash income from livestock enterprises. In individual States cotton looms even more

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Based on an address by I. W. DUGGAN, Director, Southern Division, Agricultural Adjustment Administration, before the American Farm Economic Association, at Philadelphia, Pennsylvania, December 28, 1939.



important. In Mississippi, for example, where 66 percent of the people live on farms, the income from cotton during the 12 years has varied from 65 percent to 83 percent of the total cash farm income.

In 1934, cotton was produced on over two-thirds of the 2,713,597 farms in the 10 principal Cotton States. According to the last decennial census, more than 80 percent of the farms producing cotton in these States received at least 40 percent of their total income from cotton. Total farm population of the United States is about 32 million, and of this number approximately 10 million live on cotton farms, and derive the major portion, and in many cases their entire cash income, from the production of cotton. In 1924, 43 percent of the cultivated acreage in the 10 States named was devoted to cotton, in 1929, 44 percent, and in 1934, 27.5 percent.

Cotton is not only important to the farm people of the South, but to the region's entire population. In these 10 States many facilities have been developed to finance, transport, handle, and process the cotton crop. In some areas even the educational system is built around the cotton economy. The income from cotton determines to a large degree the funds available for education, and in many rural areas the school session is adjusted so as not to conflict with the peak of labor requirements in the production of cotton.

The first and most important problem of the South is that of low income. To state the problem simply, there just is not enough total agricultural income in the South to support the region's extremely dense farm population. In the 10 principal Cotton States, 47 percent of all the people live on farms. The average per capita income of these rural people is unbelievably small. They are, as the President has so aptly stated, "ill-fed, ill-clothed, ill-housed." Many, if not all of these ills, can be traced directly to an inadequate income. There is no hope of correcting these ills through the redistribution of the available income, because that income is so small and so inadequate that even if it were redistributed there still would not be enough to go around. The first problem is to increase the total income going to the South so there will be more to divide among its dense farm population.

The gross farm income per person for the 10 principal Cotton States for the years 1924-35 averaged \$184. For the first 5 years it averaged \$238, and for the last 5 years, \$127. The cash income is even more significant. For the first 5 years, this cash farm income amounted to \$190 per person and for the last 5 years it amounted to only \$95. It is impossible to distribute such a small cash income so as to give an adequate purchasing power to the entire farm population. It is impossible to achieve or maintain even an un-American standard of living on an income that low.

Out of this inadequate income it is necessary for producers to pay certain production costs, so that the income left for living is a much smaller figure. The cash out-of-pocket cost of growing cotton, the most important crop, is relatively large. The average cost for fertilizer alone, for the years 1923-32, inclusive, for the 10 States amounted to \$2.07 an acre. Fertilizer costs ranged from an average of 25 cents an acre in Oklahoma to \$7.40 an acre in North Carolina.

The cropland per capita of farm population in the South is far too small. In 8 of the 10 principal Cotton States there is less than 8

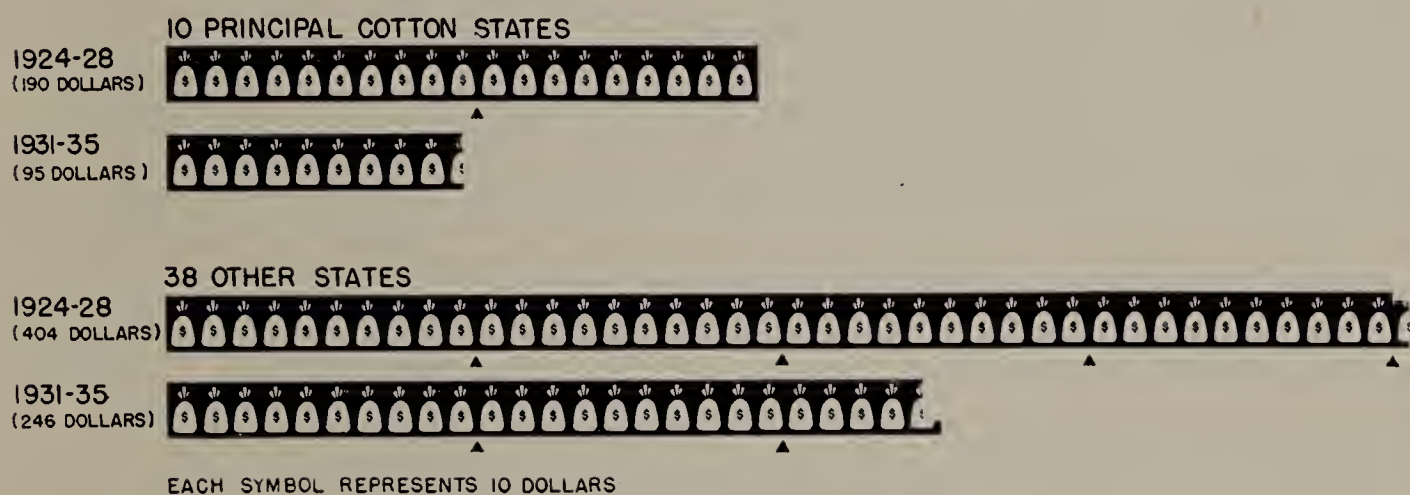


acres, and in 5 of these States there is less than 6 acres of cropland per farm person. More than one-third of all the farms in the United States are located in the 10 principal cotton-producing States. Out of the national farm population of almost 32 million people, more than 13 million live on all types of farms in these 10 States. With this dense farm population and limited cropland, the farming units of the South are generally too small to permit efficient operation and to support the average family. Even with the most intensive cultivation, ignoring for the time being the limited markets, 5 acres of cropland per person is not sufficient to maintain a standard of living equal to the average for all United States farmers. It is not probable that over a long period of time the dense farm population of the South can be supported on the limited cropland of the area.

Cotton has been the source of cash income in the South, because, in addition to being naturally adapted to the area, it has returned over a long period a higher income on both a per acre and a per hour basis than any other major crop except tobacco. According to an

### PER CAPITA CASH FARM INCOME (5 YEAR AVERAGE)

(78 CROPS AND 13 LIVESTOCK ITEMS)



SOUTHERN DIVISION, AAA, U.S.D.A., JUNE 1940

extensive study made by the Bureau of Agricultural Economics,<sup>1</sup> the per acre and per man hour returns from cotton are small, but they are still far in excess of any other crop universally adapted to the South and for which there is a ready cash market.

The returns from crops other than cotton and tobacco might be somewhat higher if such crops were planted on the best land in the area, but they would still fall far short of equaling the income from cotton or tobacco.

In the report on the same study there is shown the estimated average acreage required to produce \$100 worth of products from certain livestock enterprises and from cotton in 8 of the principal Cotton States, on the basis of average yields and prices in the 10 years, 1923-32. Texas and Oklahoma were omitted because the principal livestock areas in those States are not cotton-producing areas to a large extent.

About one and one-half to over eight times as many acres were required to produce \$100 worth of products in the case of dairying, beef cattle, and hogs as in the case of cotton. Even poultry required

<sup>1</sup> The World Cotton Situation. Part II, Cotton Prod. U. S.—BAE, Washington, D. C., February 1936.



a third more acreage than cotton to produce \$100 worth of products. The relatively low returns from livestock enterprises in these States are attributed to the low average yields of feed crops and the low carrying capacity of most pastures. The small acreage of cropland per person is also one of the limiting factors in increasing livestock production. Other limiting factors are the large investment required in livestock enterprises, the lack of training and experience in livestock production, and the system of farm tenure. Losses from disease and insect pests still delay the expansion of the livestock industry in the South.

In the 10 principal cotton-producing States the 1935 census showed that of a total of nearly 2,714,000 farms there were 758,000 without a milk cow, 973,000 without a hog, and 340,000 without even a chicken. These figures show the drastic need for expanded production of livestock to meet home needs. The livestock that is produced in the 10 States is not an accurate guide to the number used on farms because of the large-scale livestock industry especially in the noncotton areas of Texas and Oklahoma and local areas in other States. The facts are that a considerable portion of the livestock and livestock products goes to market, and though originating in these States, does not furnish a part of the food needed by cotton farmers who cannot afford to buy these products.

In a recent preliminary study by the Bureau of Agricultural Economics<sup>2</sup> it is estimated that an additional 5.8 million acres of cropland and 8.7 million acres of pasture land would have been required in 1937 to furnish a minimum adequate diet for farm families in 8 of these 10 States. North Carolina and Tennessee are the 2 States excluded in this study. The same study showed that more than three-quarters of a million additional dairy cows were needed in 1937 to supply the dairy products and 15 million more chickens were needed to supply the eggs for a minimum adequate diet.

Here again the problem of dense farm population and limited cropland is an important factor because the profitable production of livestock requires adequate pastures and plenty of home-grown feed. Few farms in the Cotton Belt can further take away from their "cash" crops the land needed for pastures and feed. Furthermore, the South, except for certain well-defined areas, is not well adapted to grazing. There are no universally adapted perennial or biennial legumes in the South which provide grazing and forage.

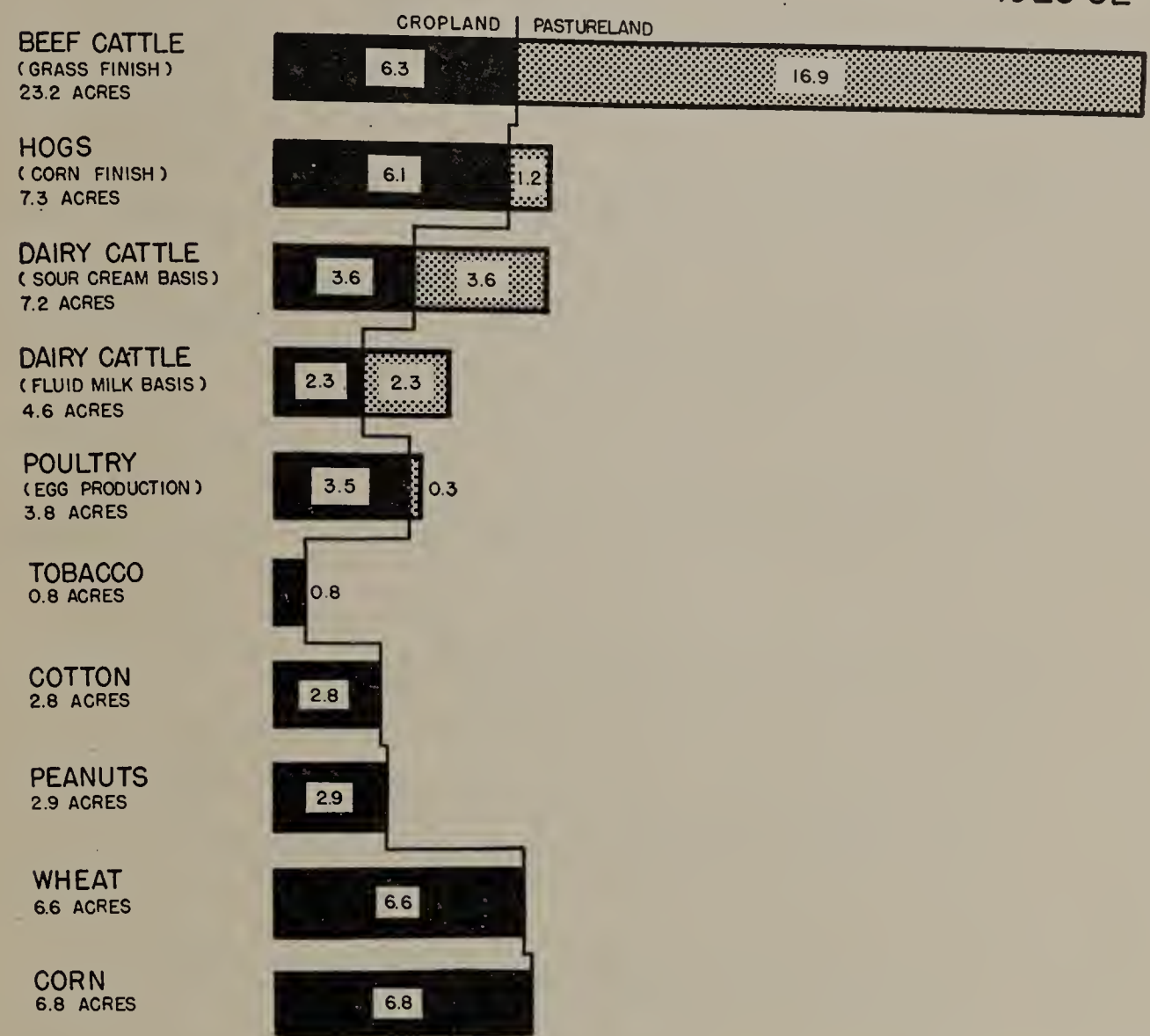
Some observers have been keenly interested in the possible expansion of the livestock industry in the South under the Agricultural Adjustment Administration's program of diverting cotton acreage. The program not only permits but encourages the production of food and feed needed for home use but there are definite restrictions on the use of diverted acres for commercial production. In addition, not all of the land diverted from cotton is available for food and feed as it is necessary to devote considerable acreage to soil-conserving and soil-building uses if the productivity of the soil is to be restored and maintained.

It is estimated that 282 million acres in the United States have been badly damaged by erosion. Of this amount approximately 30

<sup>2</sup> Food, Feed, and Southern Farms—Farm Management Reports No. 1—BAE, Washington, D. C., November 1939.

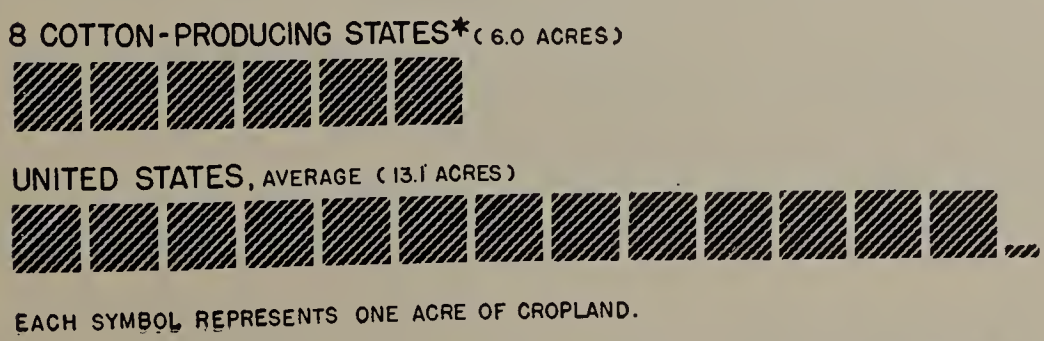
percent is in the 10 Cotton States. An additional large portion of the cropland of the South is damaged by moderate erosion. The system of tenure, the cropping system, the low income, the topography, and the climate have, for a long period, contributed to the depletion of the soil.

# ACREAGE REQUIRED TO PRODUCE 100 DOLLARS WORTH OF PRODUCTS IN 8 COTTON-PRODUCING STATES,\* 1923-32



\* NORTH CAROLINA, SOUTH CAROLINA, GEORGIA, ALABAMA, TENNESSEE, MISSISSIPPI, LOUISIANA, AND ARKANSAS.  
SOURCE: U.S.D.A., B.A.E., WORLD COTTON SITUATION-(MIMEO)-FEBRUARY 1936. (PART 2)

## ACRES OF CROPLAND PER FARM PERSON - 1935



COMPUTED FROM CENSUS OF AGRICULTURE, 1935.  
SOUTHERN DIVISION, AAA, U.S.D.A. - JUNE 20, 1940.



Sharecroppers and tenants who stay on a farm for only 1, 2, or 3 years have not been interested in expending the labor and money necessary to conserve and build the soil. Moreover, they have not known how to do this, and the management has not encouraged them along this line. The farm income has been so low that every dollar was needed for bare subsistence. Money could not be spared to buy the seed and fertilizer needed in soil-conserving practices.

Because of the dense farm population and the low income, too much of the land of the South has been devoted to soil-depleting, intertilled cash crops which leave the soil bare during the open winters, the season of heaviest rainfall in most of the region. Much of the cropland, especially in the Piedmont areas, should not be planted to row crops because it is too steep for cultivation. Nevertheless, it is continually cropped year after year in cotton and corn because of the need for land. To keep a cover on the soil throughout the year in much of the South, it is necessary to plant both a winter and a summer cover crop. In most cases the seed for winter cover crops has to be imported from without the region and requires an out-of-pocket cash outlay. To get satisfactory results from cover crops in the South, it is necessary on much of the land to apply phosphate, lime, or both, which also requires a cash outlay.

The opportunities for supplementary farm income from forest enterprises are not being used to benefit the farmer to the fullest extent in the South. The lack of stability in the farm population, the length of time before income can be realized, and the size of farm units all hinder development of forest enterprises.

The story of forestry in the South in most instances is a story of exploitation. From my rather limited observations, the present operations of the pulp mills are the last stages in the exploitation of the forests of the South. Many farmers have told me of the low prices they have received for wood sold to the pulp mills. That is distressing news today, but what concerns me most is that it foreshadows further depletion in the years ahead of the South's once magnificent forests. Improved forestry methods are needed, and improved woodlot management would be an asset to cotton farmers.

Probably one of the most discussed problems of the South is the high rate of farm tenancy. It seems to me, however, that the South's system of tenure, the cropping system, and the credit system have grown up together and are so closely intertwined that it is difficult to deal with any one separately.

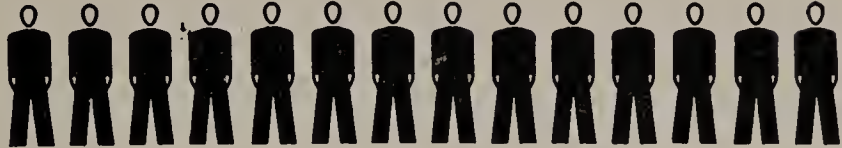
Sharecropping dates back to the War between the States and is an outgrowth of the conditions following the emancipation of the slaves. The planter had possession of the land and in many cases, the tools and equipment, but no money with which to employ labor. The laborer had no money with which to acquire land, tools or equipment, or to finance his operations, and was unskilled in any other occupation except agriculture. Out of this situation grew the sharecropper-tenant system as we have it today. The need for credit to finance crops made it essential that crops be grown for which there was a ready cash market. Cotton was the natural answer to the cash crop problem.

The high rate of tenancy in the South is too well known for any detailed discussion. It will be sufficient to remind you that 60 per-

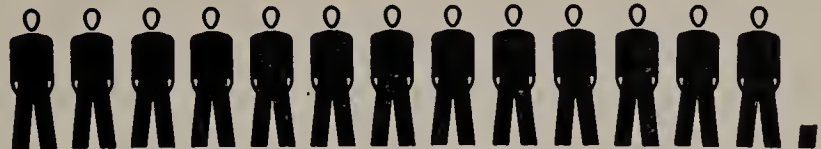


# PERCENTAGE OF FARMERS WHO ARE TENANTS – 10 PRINCIPAL COTTON STATES, 1935

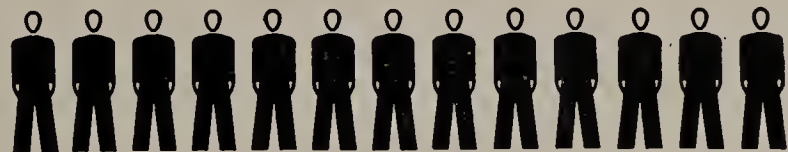
MISSISSIPPI  
69.8 PERCENT



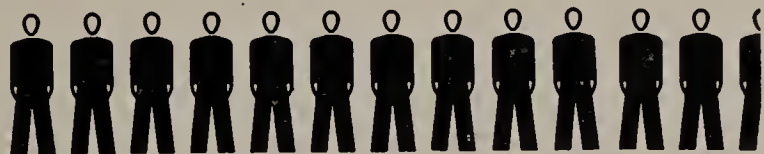
GEORGIA  
65.6 PERCENT



ALABAMA  
64.5 PERCENT



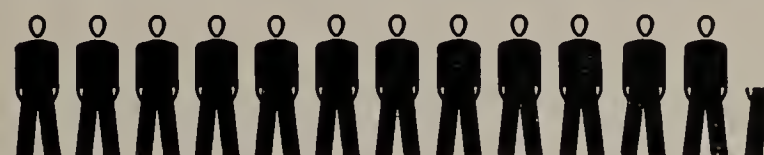
LOUISIANA  
63.7 PERCENT



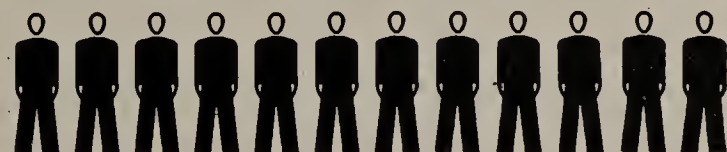
SOUTH CAROLINA  
62.2 PERCENT



OKLAHOMA  
61.2 PERCENT



ARKANSAS  
60.0 PERCENT



TEXAS  
57.1 PERCENT



NORTH CAROLINA  
47.2 PERCENT



TENNESSEE  
46.2 PERCENT



10 PRINCIPAL  
COTTON STATES  
60.0 PERCENT



EACH PERSON REPRESENTS 5 PERCENT OF FARMERS  
SOURCE: REPORT OF THE PRESIDENTS COMMITTEE, FEBRUARY 1937.

cent of all the farmers in the 10 States are tenants or sharecroppers. The percentage ranges from 47 in North Carolina to 70 in Mississippi. Despite the heavy Negro farm population, there are 40 percent more white than Negro tenants in the South. Tenancy has shown a steady increase, even during the relatively prosperous period of the twenties. In the State of Oklahoma, for example, which started out 50 years ago as free land to all who would homestead it, we find today 61 percent of the farmers are tenants. On the average about 40 percent of the tenants in the South move every year, and over half move every 2 years.

The credit system of the South with high interest rates has contributed to the tenancy problem. However, providing low interest credit alone will not solve this problem. If the income from the farm is not sufficient to pay back the principal, a low interest rate in itself would not bring about farm ownership. Here again the press of population for land tends to lead to the overcapitalization of land values and retards operator ownership.

There are other matters growing out of the sharecropper-tenant system that should be called to your attention. The question of a fair division of crop and livestock products between sharecroppers and landlords and between tenants and landlords has long been a controversial issue. In recent years, it has come up repeatedly in connection with division of Government payments. As yet, this question has not been satisfactorily answered either for the landlord or the tenant. However, here again the division of an inadequate income cannot be satisfactory to either the tenant or the landlord. The first problem is to increase the total income.

Under the farming and tenure system, tenants find it difficult or impossible to obtain productive employment when not engaged in the production and harvesting of the cotton crop, which requires only about 120 days of productive labor. Thus, for two-thirds of the year the cotton farmer is practically without cash-producing employment.

The tenant, however, does have opportunity for additional employment if he produces his own food and feed and takes care of his livestock, farm buildings, and equipment. While this would tend to lower the cash expense and improve the standard of living, it would not materially add to the cash income and purchasing power. Yet, even here we meet resistance because the skill required to properly do these things has not been developed. These people lack experience and educational opportunities.

Educational opportunities are lacking despite the fact that the 10 principal Cotton States spent 3.2 percent of their total 1935 income for educational purposes. This figure compares favorably with other regions and the United States as a whole. We must keep in mind, however, that the South has an added burden of supporting a dual school system which, while necessary, tends to increase the financial burden.

The opportunities for part-time employment of the South's rural people in industry are also limited. There are large deposits of certain minerals in the South, but even here the opportunities for employment of seasonal farm labor are limited. It might be mentioned in passing, that the area does not receive maximum benefits from its natural resources because, as a rule, they are controlled by absentees.



The annual production of oil in Texas, for example, has a valuation of several hundred million dollars, yet only a small amount of this remains in Texas in the form of royalties, labor, and transportation costs. The same is true of many of the manufacturing and other industrial concerns located in the South, as most of these have been developed with outside capital and the profits go out of the region. The large insurance companies are not located in the South and for a long period of years the South has sent money which was sorely needed for local development to other regions to buy insurance.

Many of the advantages the South has had to offer industry have been nullified. Freight rates have played no small part in offsetting the natural advantages of the South. In a recent study made by the Tennessee Valley Authority<sup>3</sup> it was found that the per ton-mile cost of hauling freight is actually lower in the South than it is in the Northeastern States yet the charges for freight are considerably higher in the South than they are in the Northeast. This disparity is even greater between the Northeast and the Western areas.

The use of consumption goods in the South is low because its people do not have the necessary purchasing power. If more manufacturing and industrial plants were located in the South, there would be a larger outlet for a more diversified agriculture. We have a large group of people who are not able to buy the consumption goods they need. These people need employment and could be used in producing these goods. Could not these two factors be reconciled without detriment to other regions?

It is possible that all or almost all of these handicaps could have been overcome if it had not been for the long-time national tariff policy. That, of course, is one man's personal opinion on a deep-rooted economic question that has rocked this country since the days of Alexander Hamilton—split it once—and apparently is just as far from being settled today as it ever was. The reciprocal trade agreements program of the present Administration is one approach to this problem but even this more or less mild effort to recognize that we can't sell if we don't buy is being singled out for attack in some quarters. The tariff is merely mentioned as one of the South's major problems.

Cotton and tobacco, the principal crops of the South, are both export products and we normally sell half or more of these crops abroad. Historically, the whole economy of the South has been built around cotton. Cotton has been the most important export commodity of the United States since shortly after Whitney invented the cotton gin.

The average annual value of cotton exports from 1875 to 1910 amounted to about \$260,000,000. During these same years the average favorable balance of merchandise exports from this country amounted to about \$250,000,000. This was a period when it was generally considered that the United States was prosperous; a period when the interest and principal of our foreign debts were being paid off. In other words, cotton exports played no small part in paying for the industrialization of this country in the nineteenth century.

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<sup>3</sup> The Interterritorial Freight Rate Problem of the United States.



If 90 percent or more of the cotton crop were domestically consumed, it might not be difficult to attain parity income from cotton production. But, whether we like it or not, that is not the case. American cotton depends on foreign mills for a large part of its consumption. Suppose, for example, that our cotton producers during the last few years had received a parity price for that portion of the crop domestically consumed, world prices for the remainder of the crop, even with normal production, would leave the farmer's income from cotton much below parity, possibly 25 to 30 percent below.

Prior to the World War we were a debtor Nation, but we came out of the war a creditor Nation, which made it difficult to sell abroad. For a while, through large loans during the 1920's, the full effect of the change to a creditor nation was not felt on exports. Trade agreements, such as the one in which Japan agreed to take up to 1 million bales of Indian cotton a year and India agreed to take up to 400 million yards of Japanese cloth a year, have further handicapped the exports of American cotton.

Another important factor is that foreign acreage in cotton production has been on an upward trend during the last half century. According to a study by the Bureau of Agricultural Economics in 1934, foreign cotton production for the preceding 45 years increased at the rate of 150,000 bales a year while the average annual increase for the United States was a little more than 100,000 bales a year. Since 1920 foreign acreage has almost doubled. About 17 million acres of this increase took place between 1932 and 1938. However, most of this increased acreage in foreign countries is accounted for by the four countries of Russia, China, Uganda, and Brazil. The increase in three of these countries, China, Russia, and Uganda, can be attributed to internal conditions and probably would have taken place regardless of policies in other countries. This is also true of a considerable amount of the increase in Brazil.

It should be borne in mind that this increase in foreign acreage of cotton has taken place while the world price of cotton was on a very low level. About 10 years ago foreign countries produced around 10 million bales of cotton for the equivalent of approximately \$900,000,000 in American money. In recent years foreign countries have produced around 16,000,000 bales of cotton for an equivalent of around \$600,000,000 in American money. These foreign countries are now growing 60 percent more cotton for about 30 percent less money than they did 10 years ago.

Cotton farmers of the South cannot produce cotton for the world market and live at world prices. On the other hand, they cannot afford to give up the foreign market for cotton without rearranging the whole economy of the South. Such a rearrangement would affect the entire Nation.

One other development which is making it more difficult to sell cotton abroad is the increased production of continuous filament rayon and rayon staple fiber. World production of these fibers increased from about 33,000,000 pounds, or the equivalent of 78,000 bales of cotton in 1920, to 2,231,000,000 pounds or the equivalent of over 5 million bales of cotton in 1939. Most of these fibers are produced in Japan, Germany, United States, Italy, Great Britain, and France in the order named. It does not mean that this much cotton has been



replaced, but the increased use of synthetic fibers has to be reckoned with both at home and abroad in dealing with the cotton problem. Possibly as significant as the increase in the production is the decline in price of filament rayon. In 1920 the price of filament rayon was \$4.66 per pound of yarn. By 1939 the price had declined to 52 cents per pound of yarn.

The problems raised appear to be the basic economic ills of the South. There are others, of course, that have not been expanded upon, such as the prevalence of diseases—particularly nutritional diseases growing out of inadequate diets, and the absence of adequate medical care and hospital facilities. Then, too, we have the sorry spectacle of women and children working long hours in cotton fields—women who bear more than their share of the Nation's children. In sharp contrast to the hours of back-breaking hand labor, we have the more recent mechanization of cotton production with tractors for cultivation, airplanes for dusting and the mechanical picker lumbering through the experimental stage.

These problems will not be elaborated upon, for it seems that they are contributory to, or have resulted from, a desperate situation which is the fountain head of the South's economic ills. This desperate situation can be summarized in one statement. That is: the press of a dense farm population against the limited natural resources, together with artificial, man-made handicaps and legal barriers, such as the tariff, have resulted in an inadequate income both in the aggregate and on a per capita basis.

